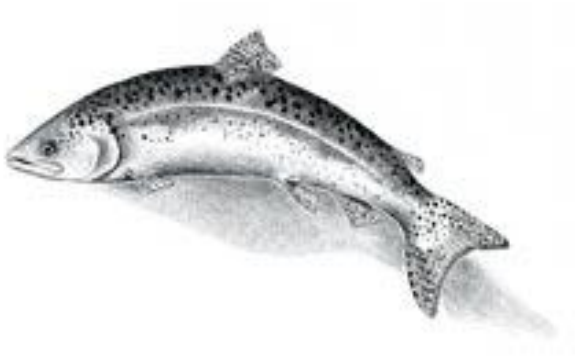
# California Department of Fish and Game Fortuna

## Northcoast Watershed Improvement Center

## Site Handbook

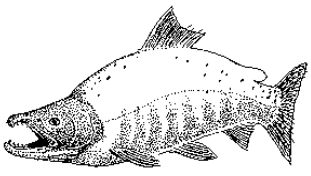


**Updated 5/31/2012**

1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

## Watershed Stewards Project Mission

The mission of the AmeriCorps Watershed Stewards Project is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.



*Sockeye Salmon*


1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

# Table of Contents

# Introduction

## Site Description

*Location* 1455 Sandy Prairie Court, Suite J

Fortuna, CA 95540

*Agency Affiliation* California Department of Fish and Game

*General Ecology*

## Mentor Bios

**Beatrijs deWaard**
Beatrijs has worked for the Fortuna DFG Fisheries Restoration Grants Program as an environmental scientist since 2008. Prior to working for the grants program, he worked for the CDFG California Coastal Watershed Assessment and Planning Program for seven years. He has an undergraduate degree in Ecology, Evolution, and Conservation Biology from the University of Texas at Austin. He also attended graduate school at Utah State University where I pursued further education in Aquatic Ecology with a focus on stream environments.

**Erik Helgoth**
Erik's passion for fly fishing and outdoor activities led him to leave a career in business back in the mid 90's to pursue a career involving natural resource conservation. He moved to Humboldt County in 1996 to attend graduate school at Humboldt State University, where he studied fisheries biology/ecology with an emphasis on salmonids and their habitat. After 10 years working with the Department of Fish and Game reviewing timber harvest plans for compliance with state environmental law, Erik joined the Fisheries Restoration Grant Program (FRGP) team in late 2010. With the FRGP, he works as a fisheries biologist and manages grants funded to restore anadromous salmonid habitat and populations in California. Erik can be contacted via e-mail at ehelgoth@dfg.ca.gov.

**Christine Ramsey**
Christine Ramsey is an Environmental Scientist with the California Department of Fish and Game (DFG). She graduated from Humboldt State University with a Bachelors degree in Natural Resources Planning and Interpretation. After a few years of seasonal work with the state and national parks, Christine served two terms with the AmeriCorps Watershed Stewards Project. She worked very shortly for the federal government consulting on the endangered species act. Since 2000, Christine has worked for DFG administering grants for the Fisheries Restoration Grant Program.

**Trevor Tollefson**
Trevor manages grants as an Environmental Scientist for DFG's Fisheries Restoration Grants Program. He graduated from Humboldt State University with a Bachelor of Science degree in Wildlife Biology. He has varied field experience working in wildlife, fisheries and forestry. Trevor has been with DFG since 2001 and is an alumnus of the AmeriCorps Watershed Stewards Project.

## General Calendar of Duties at Calif. Dept. of Fish and Game Fortuna NCWIC

| *Month* | *Location* | *Site Duties* | *Work Load* | *Typical Work Hours* |
|---|---|---|---|---|
| **Fall** | | | | |
| October | Office<br><br>Field | Site Orientation, Data Entry<br><br>Stream Habitat Inventory & Bio Surveys | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30)<br>10 hour days – 4 days/wk (M-Th 7:00-5:30) |
| November | Office<br>Field | Data entry, Report Writing<br>Spawner Surveys | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30) |
| **Winter** | | | | |
| December | Office<br>Field | Data Entry<br>Spawner Surveys | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30) |
| January | Office<br>Field<br>Classroom | Data Entry<br>Spawner Surveys<br>Education | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30) |
| February | Office<br>Field<br>Classroom | Data Entry<br>Spawner Surveys<br>Education | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30) |
| **Spring** | | | | |
| March | Office<br>Classroom | Data Entry<br>Education | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30) |
| April | Office<br>Field<br><br><br><br>Classroom | Data Entry, Survey Preparation, Landowner Access, Fish Release Field Trips, Stream Habitat Inventory Training<br>Education | Moderate | 8 hour days – 5 days/wk (M-F 8:00-4:30) |
| May | Office<br>Field | Data Entry, Report Writing<br>Fish Release, Stream Habitat Inventory Surveys | Busy | 10 hour days – 4 days/wk (M-Th 7:00-5:30) |
| **Summer** | | | | |
| June<br>July<br>August | Field | Stream Habitat Inventory Surveys, Biological Surveys, Fish Relocation | Busy | 10 hour days – 4 days/wk (M-Th 7:00-5:30) |

## Description of Site Duties

*Introduction*

The focus of the NCWIC office is salmonid habitat restoration. Members' duties will very throughout the year as the seasons change. Members will collect habitat and population data. Members complete field work in pairs working independently.

*End of Dry Season*

Members start in October as the dry weather dependent surveys come to an end. Members will accompany field crews on stream habitat inventory surveys. In addition, members will assist mentors in implementation monitoring of restoration projects and relocation of fish before restoration project implementation.

*Spawner Surveys*

Spawner surveys start in November in tributaries to Humboldt Bay, the Van Duzen River, the Eel River and one tributary to the Mad River. These streams have fall Chinook salmon, fall coho salmon and winter steelhead. The NCWIC office focuses surveys on Chinook and coho salmon. Survey crews walk predetermined stream reaches in teams of two looking for live adult salmon/steelhead, redds, and carcasses. Surveys will continue into late February or early March. Fish count data from these surveys is used to help predict the status of populations for determining ocean salmon fishing regulations and for other fisheries management purposes.

*Education*

In the late winter and spring, members go into local classrooms and teach students about science, watersheds, salmon and steelhead, the water cycle, and general ecology. Lessons have been developed for these topics but members have the opportunity to add to or modify them. The minimum requirement for WSP is to service one classroom, but members at our site often service from 3-6 classes. In April and May, members can attend field trips and help local students release steelhead from the Mad River Fish Hatchery they raised in their classrooms.

*Data Management and Survey Preparation*

Throughout the fall, winter and spring, members will assist with data management and preparation for future surveys. Both spawner survey and habitat inventory data must be entered, data must be reviewed for quality control, and watershed overviews will be completed. Members may assist with obtaining access permission from private landowners for the streams and watersheds planned for inventory. Members will also prepare tools and equipment for surveys.

*Habitat Inventory Surveys*

Members will spend the late spring and summer conducting stream habitat inventory surveys. There will be a four-day training in April to cover the background and methodology for the surveys. Survey crews will work in teams of two starting at the mouth of a stream and work upstream collecting data on the quantity and quality of fish habitat. This work can be quite rigorous and in remote locations. Crews will work ten hours per day, four days per week, often camping and away from home for the full four days.

A biological survey will be conducted on all streams inventoried. Biological surveys will assess the presence and distribution of species in a given stream. This is either done by snorkel survey or electrofishing. Snorkeling and running the electrofisher are usually conducted by a biologist. Members will accompany the biologist to identify locations found during the habitat survey and to net fish when electrofishing.

The habitat inventories and biological surveys allow collection of data used to produce reports with recommendations for specific habitat restoration improvements. These reports are also used by other agencies and organizations for management purposes.


1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

*Fish Relocation and Implementation Monitoring*

During the summer dry season, mentors are managing fisheries restoration grants funded by the Fisheries Restoration Grants Program. They will occasionally need assistance from members in relocating fish from a project area via electrofishing before the stream is dewatered or otherwise impacted by construction. The electrofisher applies an electrical current to the water to stun fish long enough to scoop them out with nets. Members may also assist mentors in implementation monitoring field inspections of restoration projects.

# ISPs and Outreach Events

## ISP Information

Mentors at this site work with a variety of restoration groups and can help members find a project they are interested in. As members may be out-of-town from May 1st through August, Individual Service Projects must be completed by May 1st. Past projects have included riparian planting, invasive species removal, and fish passage barrier removal.

## Outreach Information

Outreach opportunities include hosting a booth at local community events, attending the Creek Days Environmental Education Fair and Mad River Fish Hatchery fish release field trips.


1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

# Education

## Education Notes

Members offer the Real Science curriculum to students within the Eel River Watershed in cities that include Fortuna, Scotia, Rio Dell, Garberville, Redway, Hydesville, Carlotta and Blocksburg. The schools include suburban schools with many students and small rural schools. Members will have spent the winter working in creeks with salmonids conducting spawner surveys and be poised to share their excitement with the students. Members will complete their education before May 1st to allow for the habitat inventory season.

## Site / Region Specific Education Resources

*Online Resources*

Classroom Aquarium Education Program - www.classroomaquarium.org

Mad River Fish Hatchery http://www.dfg.ca.gov/fish/Hatcheries/MadRiver/

# Local Ecology

## Descriptions of Local Ecology

The Department of Fish and Game in Fortuna has work sites throughout the northern California coastal region, going as far south as Mendocino County and as far north as the Oregon border. Because this office covers such a large region, members will experience a variety of flora and fauna. The most notable flora is the coastal redwood that can be found within Smith River, Redwood Creek, Mad River, Humboldt Bay, and Eel River watersheds. Other trees that can be found throughout the area include Douglas fir, Sitka spruce, willows, cottonwood, big leaf maple, white and red alders, Port Orford Cedar (in more northern areas), manzanita, madrone, thimbleberries, salmon berries, and black berries. The most common animals that can be found is this region are black bears, raccoons, Roosevelt Elk, black-tailed deer, coyotes, bobcats, skunks, river otters, tree frogs, red-tailed hawks, and bald eagles. Coho salmon, Chinook salmon, and steelhead trout receive a great deal of attention throughout this region. Coho salmon were historically present in the major rivers of this region, but their numbers have dwindled over the past century (and as much as 70% over the past 40 years in the Mad River Hydrologic Unit). However, the Humboldt Bay watershed has been recorded as having some of the best wild salmon runs remaining. Land uses range from timber production and agriculture to mining and urban development.


1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

# Housing and Local Resources

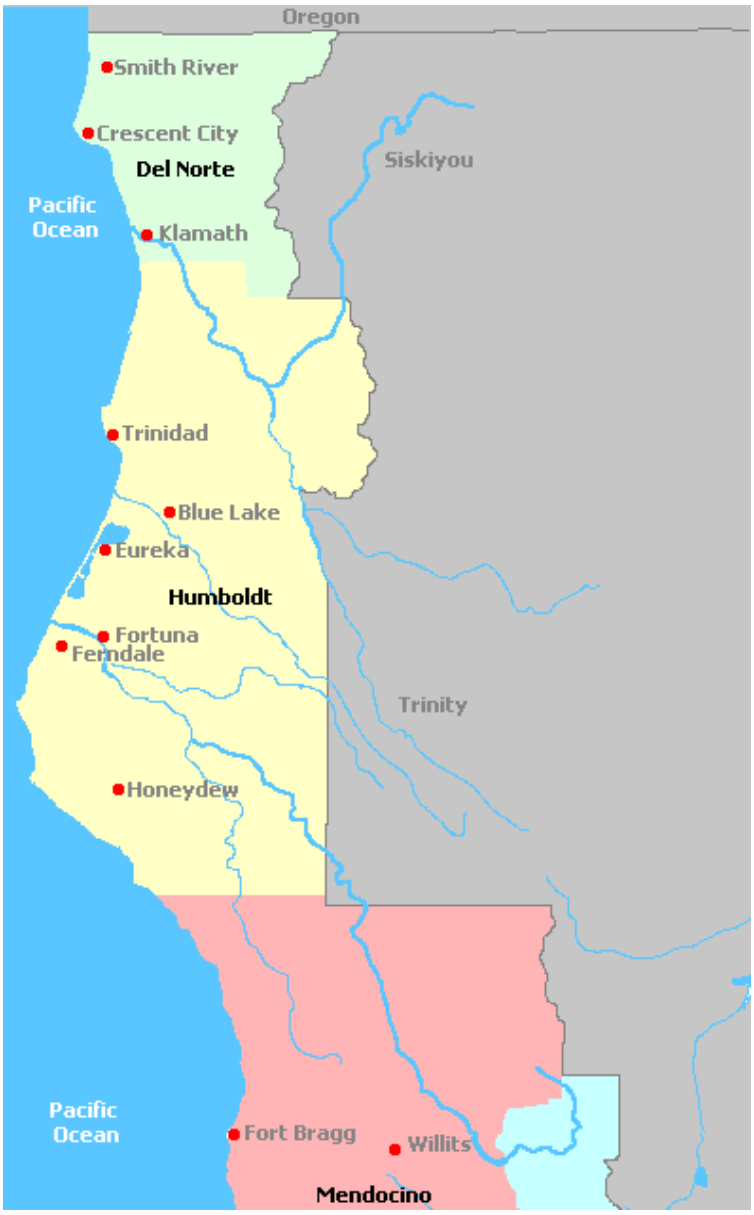
## Housing Contact List

| | |
|---|---|
| *Online Resources* | Humboldt Craigslist - http://humboldt.craigslist.org<br>Times-Standard Newspaper - http:/www.times-standard.com |
| *Bulletin Boards* | Both the Arcata and Eureka Co-op stores have housing bulletin boards. |
| *Property Management Agencies* | Six Rivers Property Management, (707) 725-1094 or (707) 826-1094, 710 Main Street, in Fortuna, rentals@six-rivers.com<br>Professional Property Management: (707) 444-9197 located at 3109 H St. in Eureka<br>Rupp and Associates: (707) 443-7091 located at 1010 7th St. in Eureka<br>Humboldt Property Management: (707) 825-1515 located at 954 H St. in Arcata |

## Local Resource Contacts

# Community Information

## Map of Area




borrowed from http://www.wineandvinesearch.com/united_states/california/north_coast.php

## Community Demographics


1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

## Community Services

# Entertainment and Community Events

## Resources for Affordable Entertainment Options

The Northcoast Journal calendar section www.northcoastjournal.com/calendar

## Recurring Event List


1455 Sandy Prairie Court, Suite J
Fortuna, CA 95540
707-725-1060

# Helpful Hints

**Title**

# Attachments

**Contact Lists**

**Ed Logs & Information**

**ISP Logs & Information**

**Outreach Summaries & Information**

**Site Protocols & Information**

**Site Forms**